

**Notice of Allowability**

Application No.

09/736,073

Examiner

Michelle Crowell

Applicant(s)

ELLIOTT ET AL.

Art Unit

1763

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to April 30, 2007.
2. ☒ The allowed claim(s) is/are 1-14, 17-20, 23-27, 29 and 34-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 30, 2007 has been entered.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Jason Shanske on June 20, 2007.

3. The application has been amended as follows:

In line 2 of claim 1, before "substrate", insert --stationary--;

In line 9 of claim 1, after "inside", insert --the reaction space defined within--;

In line 13 of claim 1, delete "relative to the reaction chamber and the substrate surface", insert --across the stationary substrate surface--;

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In line 2 of claim 29, before “substrate”, insert –stationary--;

In line 9 of claim 29, after “inside”, insert –the reaction space defined within--;

In line 13 of claim 29, after “substrate”, insert –by moving said rectangular beam, said gas injection module and said gas exhaust module across the stationary substrate surface.

In line 2 of claim 34, before “substrate”, insert –stationary--;

In line 8 of claim 34, after “inside”, insert –the reaction space defined within--;

In line 12 of claim 1, delete “relative to the substrate surface and chamber”, insert –across the stationary substrate surface--;

In line 2 of claim 35, before “substrate”, insert –stationary--;

On page 7, line 5 of claim 35, after “module”, insert –inside the reaction space defined within said chamber--;

On page 7, line 8 of claim 35, after “module”, insert –said gas exhaust module--;

On page 7, line 8 of claim 35, delete “relative to the substrate surface and chamber”, insert –across the stationary substrate surface--;

In line 2 of claim 36, before “substrate”, insert –stationary--;

In line 9 of claim 36, after “module”, insert –inside the reaction space defined within said chamber--;

On page 8, line 1 of claim 36, after “module”, insert –said gas injection module, and said rectangular beam are--;

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On page 8, line 1 of claim 36, after “module”, delete –is--;

On page 8, line 1 of claim 36, delete “moveable”, insert –movable--;

On page 8, line 1 of claim 36, delete “with said reaction zone”, insert –across the stationary substrate surface--;

In line 2 of claim 37, before “substrate”, insert –stationary--;

In line 8 of claim 37, before “substrate”, insert –stationary--;

In line 11 of claim 37, before “substrate”, insert –stationary--;

In line 12 of claim 37, before “substrate”, insert –stationary--;

In line 14 of claim 37, after “inside”, insert –the reaction space defined within --;

In line 15 of claim 37, after “gas”, insert –is movable across the stationary substrate surface--;

In line 2 of claim 38, before “substrate”, insert –stationary--;

On page 9, line 3 of claim 38, before “substrate”, insert –stationary--;

On page 9, line 4 of claim 38, after “inside”, insert –the reaction space defined within --;

On page 9, line 5 of claim 38, after “the”, insert –stationary--;

On page 9, line 9 of claim 38, before “substrate”, insert –stationary--;

In line 2 of claim 39, before “substrate”, insert –stationary--;

In line 7 of claim 39, before “substrate”, insert –stationary--;

In line 8 of claim 39, after “the”, insert –reaction space defined within --;

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In line 10 of claim 39, before “substrate”, insert –stationary--.

4. Claim 16 is cancelled.

***Allowable Subject Matter***

5. Claims 1-14, 17-20, 23-27, 29, 34-39 are allowed.

**REASONS FOR ALLOWANCE**

6. The following is an examiner’s statement of reasons for allowance:

The prior art, either singly or in combinations, fails to anticipate or render obvious a scanning plasma reactor for exciting or ionizing reactant gases with UV radiation at a stationary substrate surface comprising: a reaction chamber; a vacuum chuck; a beam forming module for transforming UV radiation into a rectangular beam; a gas injection module; and a gas exhaust module located inside the reaction space defined within the chamber; and specifically wherein the gas injection module and the gas exhaust module are in close proximity to the rectangular beam, and the rectangular beam, gas injection module, and the gas exhaust module are movable across the stationary substrate surface.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Crowell whose telephone number is (571) 272-1432.

The examiner can normally be reached on M-F (9:30 -6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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